

REMARKS/ARGUMENTS

This paper is submitted in response to the Office Action mailed June 22, 2011. Reconsideration is respectfully requested.

Claims 1-17 were examined and rejected. By the amendment set forth above, claims 1, 2, 4-7, 9-13, 15, and 16 have been amended; claims 3, 8, 14, and 17 have been cancelled; and new claims 20-30 have been added. As explained below, it is respectfully submitted that claims 1, 2, 4-7, 9-13, 15, 16, and 20-30 are patentable over the cited art.

Preliminarily, it is noted that the references listed in the specification, unless previously listed in the IDS submitted on May 15, 2009 or cited by the Examiner on form PTO-892, have not been considered. Accordingly, a second IDS in compliance with 37 CFR 1.98 is submitted herewith, in accordance with 37 CFR 1.97(c)(2), and accompanied by the fee prescribed by 37 CFR 1.17(p), to make these references of record.

The objection to the drawings under 37 CFR 1.83(a) is also noted. This objection is rendered moot by the cancellation of claim 8.

Claims 1-14 were rejected under 35 U.S.C. Section 112, second paragraph. Specifically, claim 1 was rejected for lack of antecedent basis for the term "said hardened glass." Claim 1 has been amended to remove this term. Claims 10-14 were rejected for lack of antecedent basis for the term "said distance elements." This rejection has been overcome by amending claim 10 to depend from claim 9. Claim 12 has also been amended to delete the reference to "the inner space," thereby overcoming the problem of lack of antecedent basis. Claim 14, which was objected to as being an "omnibus" claim, has been cancelled and replaced by new claims 20-30, which clearly define the "metes and bounds" of the claimed invention.

Claims 1-4, 6-12, and 14 were rejected under 35 U.S.C. Section 102(b) as anticipated by FR 2,708,030 – Marsol. Claims 1-4, 6-11, and 14-17 were rejected under Section 102(b) as anticipated by WO 91/08366 – Davies ("Davies '366"). Claim 5 was rejected under 35 U.S.C. Section 103(a) as unpatentable over Marsol and Davies '366 in view of EP 0 113 209 – Davies ("Davies '209"). Claims 12 and 13 were rejected under Section 103(a) as unpatentable over Marsol in view of US 5,079,054 – Davies ("Davies '054"). As explained below, it is respectfully submitted that claims 1, 2, 4-7, 9-13, 15, 16, and 20-30 define patentably over these references, taken singly or in combination, and are therefore allowable.

Independent claims 1 and 15 have been amended to define the glass panel as being "self-supporting," as originally recited in claim 3 (now cancelled). New independent claim

20 likewise defines the glass panel as being “self-supporting.” None of the references suggests a structure that includes a “self-supporting” glass panel. Specifically, neither Marsol nor Davies ‘366 contains any teaching or suggestion of a self-supporting glass panel. Marsol clearly specifies that the glass panel requires a frame for support, and is therefore not “self-supporting.” For example, the first paragraph of page 1 of the English translation of Marsol (hereinafter “Marsol translation”) states that the disclosed “invention” includes “the use of a support frame surrounding the glass panel.” References to a support frame are found throughout the Marsol translation (e.g., the last paragraph of p. 1, the first and second paragraphs of p. 2, the first and sixth full paragraphs of p. 3, and element 6 in the drawing figure.) Likewise, in Davies ‘366, the glass panels are mounted in a supporting frame defined by “four lengths of a profile” 12, the profile including an integral spacer 21 that also provides support. See, e.g., p. 4 line 3 to p. 5, line 1.

In the present invention, by contrast, the glass panel is a self-supporting, structurally load-bearing element that does not contemplate the use of any external supporting structure, such as a frame. See, e.g., paragraph 21 of US Pat. App. Pub. No. 2009/0301008 (hereinafter “US 2009/0301008”). The pultruded elements along the rectilinear segments of the glass panel merely contribute to the tensile strength of the building element including the glass panel. See, e.g., paragraph 23 of US 2009/0301008.

Nor would it have been obvious to modify the teachings of either Marsol or Davies ‘366 to incorporate a self-supporting glass panel. First, there is nothing in the cited references that suggests such a modification. Second, the use of a load-bearing frame to support the glass panel would make a self-supporting glass panel unnecessary. Conversely, the use of a load-bearing, self-supporting glass panel would make a supporting frame superfluous. Thus, it would not have suggested itself to those of ordinary skill in the art, absent the teaching of the present disclosure, to provide a structure having both a supporting frame and self-supporting glass panels. Finally, faced with the problem of improving the pressure strength and/or load-bearing properties of either the Marsol or Davies ‘366 structure, one of ordinary skill in the art would have looked to strengthening the frame surrounding the glass panel, not to making the glass panel self-supporting without a frame.

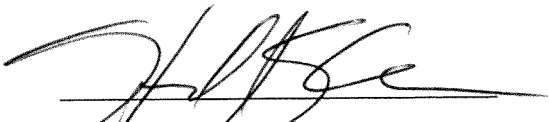
Accordingly, it respectfully submitted that the prior art of record neither teaches nor suggests the use of self-supporting glass panels in the combinations claimed in independent claims 1, 15, and 20, as amended. Accordingly, it is respectfully submitted that claims 1, 15, and 20, as amended, define patentably over the art of record, and should therefore be allowed.

Claims 2, 4-7, and 9-13 depend from claim 1; claim 16 depends from claim 15; and claims 21-30 depend from claim 20. These dependent claims further define novel and non-obvious aspects of the present disclosure, and should therefore be allowed along with the aforementioned independent claims.

In summary, it is respectfully submitted that claims 1, 2, 4-7, 9-13, 15, and 16, as amended, along with new claims 20-30, define patentably over the art of record and should be allowed. Passage of the application to issue is therefore earnestly solicited.

Respectfully submitted,

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